

NOTES

CHAPTER 1

1. Forest G. Hill, Roads, Rails & Waterways: The Army Engineers and Early Transportation (Norman: University of Oklahoma Press, 1957), PP. 37-38.
2. Ibid., p. 38.
- 3* Ibid., pp. 6-10 and 38-42; Leland R. Johnson, "The Fourth Pillar of Defense: Waterways," National Waterways Roundtable Papers: Proceedings on the History and Evolution of U.S. Waterways and Ports (Institute for Water Resources, 1980), pp. 24-25 and 28-29.
4. Hill, Roads, Rails & Waterways, pp. 40-41.
5. Act of April 30, 1824; Hill, Roads, Rails & Waterways, pp. 42-44, 49.
6. Act of March 3, 1826; Report of the Board of Internal Improvement, 19 February 1829, printed in John Quincy Adams, Message from the President of the United States . . . A Canal to Connect the Atlantic with the Gulf of Mexico, H. Exec. Doc. 147, 20th Cong., 2nd Sess. (1829) , pp. 2-52.
7. Lynn M. Alperin, Custodians of the Coast: History of the United States Army Engineers at Galveston (Galveston: Galveston District, U.S. Army Corps of Engineers, 1977), pp. 37-55. The events surrounding the port improvement at Galveston Harbor illustrate this change in congressional appropriations.
8. Russell E. Westmeyer, Economics of Transportation (Englewood Cliffs, N.J.: Prentice-Hall, 1952), p. 43.
9. Ibid., pp. 81-82, 126, 453.
10. Ibid., pp. 452-53.
11. Ibid., pp. 110, 454; "The Inland Waterways Commission," Science 25 (5 April 1907): 556-57.
12. W. J. McGee, "Our Inland Waterways," Popular Science Monthly 72 (April 1908): 295.
13. Rivers and Harbors Act of March 3, 1909.
14. Alperin, Custodians, p. 154; W. D. Hornaday, "Canal to Follow Gulf Coast," Technology World 17 (August 1912): 664.
15. Alperin, Custodians, p. 155.

16. Rivers and Harbors Acts of March 3, 1925 and January 21, 1927 and An Act to promote the national defense, July 23, 1942.

17. Henry H. Buckman, "Cross-Florida Barge Canal," Proceedings of the Fifty-fourth Annual Convention, Intracoastal Canal Association of Louisiana and Texas, 27-28 September 1959, Corpus Christi, Tex. (Houston: Intracoastal Canal Association of Louisiana and Texas, 1959), pp. 12-13; Samuel Eliot Morison, History of United States Naval Operations in World War II, Vol. 1: The Battle of the Atlantic, September 1939 - May 1943 (Boston: Little, Brown, 1964), pp. 135-44; American Waterways Operators, Big Load Afloat (Washington, D.C.: American Waterways Operators, 1966), p. 48.

18. Ibid.

19. J. F. Ellison, "The Inland Waterways of the South," Annals of the American Academy 35 (January 1910): 114.

CHAPTER 2

1. H. Exec. Doc. 147, 20th Cong., 2d Sess. (1829), p. 52.

2. Ibid.

3. Virgil S. Davis, A History of the Mobile District 1815 to 1971, U.S. Army Corps of Engineers (Mobile: Mobile District, U.S. Army Corps of Engineers, 1975), p. 61.

4. William L. Dolive, "Gulf Intracoastal Waterway," typescript report (Mobile: Mobile District, U.S. Army Corps of Engineers, 1950), copy in Technical Liaison Office, Mobile District, p. 2; Annual Report of the Chief of Engineers to the Secretary of War for the Year 1884 (Washington: Government Printing Office, 1884), pp. 1227-34 (hereafter cited as ARCE, followed by date of fiscal year covered in report).

5. Major James F. McIndoe, "Preliminary Examination" and "Plan and Estimate of Cost of Improvement," in Secretary of War, Lake Pontchartrain, Louisiana, H. Dec. 881, 60th Cong., 1st sess. (1908), pp. 4, 7.

6. Dolive, "Gulf Intracoastal Waterway," pp. 2-3.

7. Davis, Mobile District, p. 61.

8. This must be a misstatement for the river and bay of Choctawhatchee, for the Chattahoochee River does not reach the Gulf of Mexico, nor is there any bay by that name.

9. Act of July 4, 1832.

10. ARCE, 1876, pt. 1, p. 509.

11. Davis, Mobile District, p. 61; ARCE, 1876, pt. 1, p. 508-14. The quotations are on page 513.
12. Rivers and Harbors Act of March 3, 1875.
13. ARCE, 1876, pt. 1, pp. 508-09. The quoted sections are on page 508.
14. Ibid.
15. Ibid. , pp. 509-12.
16. Westmeyer, Economics of Transportation, p. 118.
17. "The Inland Waterways Commission," Science 25 (5 April 1907): 556-57.
18. W. J. McGee, "Our Inland Waterways," Popular Science Monthly 75 (April 1908): 295, 289, 299.
19. "Inland Waterways: Message from Theodore Roosevelt to the Senate and House of Representatives,?? Science 27 (13 March 1908): 418.
20. "The Inland Waterways of the United States: Report of the Inland Waterways Commission," Engineering Magazine 35 (May 1908): 270-71.
21. "Inland Waterways: Message from Roosevelt," p. 420.
22. US Statutes at Large, 35: 822 and 835-36. The quoted section is on page 835.
23. U. L. Perry, "Report on intracoastal waterway development in the Mobile area," typescript (Mobile: Mobile District, U.S. Army Corps of Engineers, 1950), copy in Technical Liaison Office, Mobile District, p. 2.
24. Captain Harley B. Ferguson, 'Preliminary Examination of Channel" and "Survey of Channel," in Secretary of War, Channel from Apalachicola River to Saint Andrews Bay, Florida, H. Dec. 670, 61st Cong., 2d sess. (1910), pp. 3-4, 7-8.
25. Davis, Mobile District, p. 61; Dolive, "Gulf Intracoastal Waterway," pp. 4-5.
26. Ferguson, "Preliminary Examination of Channel," in H. Dec. 670, 61st Cong., 2d sess. (1910), p. 5.
27. Davis, Mobile District, p. 62; H. Dec. 670, 61st Cong., 2d sess. (1910), p. 9; Dolive, "Gulf Intracoastal Waterway," p. 5.
28. ARCE, 1914, p. 660.

29. Dolive, "Gulf Intracoastal Waterway, " p. 3.
30. ARCE, 1884, p. 1228.
31. ARCE, 1894, p. 1717.
32. Dolive, "Gulf Intracoastal Waterway, " p. 3.
33. Rivers and Harbors Act of March 3, 1925."
34. Report of the Board of Engineers for Rivers and Harbors, in Secretary of War, Intracoastal Waterway, St. Georges Sound to the Rio Grande Section, H. Doc. 610, 63d Cong., 2d sess. (1914), pp. 13-14.
- 35* Reports of the Chief of Engineers; the Board of Engineers for Rivers and Harbors; and the Division Engineer, Gulf Division, in Secretary of War, Intracoastal Waterway from Pensacola Bay, Fla., to Mobile Bay, Alabama. H. Doc. 42, 71st Cong., 1st sess. (1929), pp. 2, 4, 8-9.
36. Reports of the Chief of Engineers and the Board of Engineers for Rivers and Harbors in H. Dec. 42, 71st Cong., 1st sess. (1929), pp. 1-5. The quotation, printed on p. 5, is from the latter report.
37. ARCE, 1938, p. 705; Perry, "Report on intracoastal waterway development," pp. 3-4.
38. ARCE, 1930, p. 908.
- 39* Letter of the Chief of Engineers, 19 June 1929, in House Committee on Rivers and Harbors, Channel between Mobile Bay and Mississippi Sound, Alabama, H. Comm. Doc. 4, 71st Cong., 1st sess. (1929), p. 2.
40. Secretary of War, Intracoastal Waterway, Mobile Bay, Ala., to New Orleans, La., H. Dec. 341, 71st Cong., 2d sess. (1930); ARCE, 1930, p. 909.
41. I. L. Campbell, "The Gulf Intracoastal Waterway: Northwest Florida Section," typescript report (Mobile: Mobile District, U.S. Army Corps of Engineers, 1950), copy in Technical Liaison Office, Mobile District, Army Corps of Engineers, p. 3.
42. Ibid., pp. 3-4.
43. Ibid., p. 4.
44. Ibid. ; Davis, Mobile District, p. 62.
45. Report of the Chief of Engineers, in Secretary of War, Waterway from Choctawhatchee Bay to West Bay, Fla, H. Doc. 259, 72d Cong., 1st

sess. (1932) , p. 2; Perry, "Report on intracoastal waterway development," p. 3.

46. ARCE, 1938, p. 702.

47. Campbell, "The Gulf Intracoastal Waterway: Northwest Florida," pp. 5-9*

48. Reports of the Chief of Engineers, the Board of Engineers for Rivers and Harbors, and Colonel Richard Park, H. Doc. 257, 76th Cong., 1st sess. (1939), pp. 2-8; Dolive, "Gulf Intracoastal Waterway," p. 7.

49. Secretary of War, Intracoastal Waterway from Apalachicola Bay to Withlacoochee River, Fla., H. Doc. 291, 75th Cong., 1st sess. (1937), ARCE, 1939, p. 758; Secretary of War, Intracoastal Waterway from Apalachicola Bay to St. Marks River, Fla., H. Doc. 442, 76th Cong., 1st sess. (1939); ARCE, 1952, p. 654.

50. Lawrence Green, Planning Division, Mobile District, Corps of Engineers, to Al Bishop, Florida Department of Environmental Regulation, 18 May 1976, copy in files of Mobile District, Corps of Engineers.

51. Dolive, "Gulf Intracoastal Waterway," pp. 7-8; Perry, "Report on intracoastal waterway development," p. 5.

52. Ibid.

53. ARCE, 1950, p. 1639; Waterborne Commerce of the United States, Calendar Year 1978, 5 pts. (Fort Belvoir, Vs.: U.S. Army Corps of Engineers, n.d.), pt. 2, pp. 36-41.

CHAPTER 3

1. Alperin, Custodians, pp. 151-54.

2. Ibid., pp. 151-52; ARCE, 1875, pt. 1, p. 876. The concluding quotation is from the latter source.

3* Ibid., pp. 876-77 and 895-901. The first and third quotation are on page 876 and are drawn from the report of the Chief of Engineers. The second quotation, drawn from Polhemus' report, is on page 896.

4. Alperin, Custodians, p. 153; ARCE, 1875, pt. 1, pp. 897-99.

5. Ibid., pp. 876-77, 882, 900-01. The quotations are from pages 876 and 877.

6. Ibid., pp. 876-77. The quoted words are on page 876.

7. Ibid., pp. 877-79.

8. Ibid., pp. 877-86; Albert E. Cowdrey, Land's End: A History of the New Orleans District U.S. Army Corps of Engineers, and its Lifelong Battle with the Lower Mississippi and Other Rivers Wending Their Way to the Sea (New Orleans: New Orleans District, U.S. Army Corps of Engineers, 1977), p. 62.
- 90 Ibid.; ARCE, 1875, pt. 1, pp. 880-81, 889-90. Howell's quoted observation is on page 881.
10. Cowdrey, Land's End, p. 62-63.
11. Rivers and Harbors Act of July 13, 1892; ARCE, 1896, p. 1544.
12. ARCE, 1888, p. 1298; ARCE, 1897, p. 1810; ARCE, 1900, p. 2422; Rivers and Harbors Act of June 13, 1902.
13. Alperin, Custodians, p. 67.
14. Ibid., pp. 155-562, 102; Major Jadwin's report in Secretary of War, Interior Waterway from the Rio Grande to the Mississippi H. Doc. 640, 59th Cong., 2d sess. (1907), pp. 3-4, 7.
15. Ibid., pp 8-9. Forty years later, such a route was authorized. It became the Morgan City-Port Allen alternate route and was opened to navigation on July 14, 1961.
16. The special board's report is printed in Secretary of War, Intracoastal Waterway, St. Georges Sound to the Rio Grande Section, H. Doc. 610, 63d Cong., 2d sess. (1914), pp. 21-58. The quoted section is on page 36.
17. H. Dec. 640, 59th Cong., 2d sess. (1907), Secretary of War, Intracoastal Waterway from the Mississippi River at or near New Orleans, La. to Corpus Christi, Texas, H. Doc. 238, 68th Cong., 1st sess. (1924).
18. Alperin, Custodians, p. 156; H. Doc. 640, 59th Cong., 2d sess. (1907), pp. 4-5, 23; Rivers and Harbors Act of March 2, 1907; ARCE, 1909, p. 1510; ARCE, 1910, pp. 549-50.
19. Beach's endorsement, dated November 30, 1908, of a letter of November 19, 1908, from Captain John C. Oakes to the Chief of Engineers, printed in Chief of Engineers, Inland Waterway, Rio Grande to the Mississippi River, in House Committee on Rivers and Harbors Document 3, 61st Cong., 2d sess. (1908), p. 5.
20. Rivers and Harbors Act of June 25, 1910; Rivers and Harbors Act of March 3, 1909; H. Dec. 238, 68th Cong., 1st sess. (1924), p. 7.
21. Ibid.
22. Unidentified newspaper clipping in files of Gulf Intracoastal Canal Association, Houston, Tex.

23. Houston Post, morning edition, 8 August 1905.
24. Ibid., 9 August 1905.
25. Interview with Dale Miller, 24 September 1981; Tom Lea, The King Ranch (Boston: Little, Brown & Co., 1957), p. 548. In 1946 Dale Miller succeeded his father as executive vice president of the league, perpetuating his dedicated leadership.
26. Cowdrey, Delta Engineers, p. 47; Alperin, Custodians, p. 155; Houston Press, 23 March 1923.
27. Ibid.
28. Galveston Daily News, 23 March 1923.
29. Alperin, Custodians, pp. 156-57; Hearings before Committee on Rivers and Harbors, House of Representatives, 77th Cong., 1st sess., on The Improvement of the Louisiana and Texas Intracoastal Waterway from Corpus Christi, Tex. to the Rio Grande, October 7, 1941, from testimony of C.S.E. Holland, p. 7; Beaumont Enterprise, 5 July 1923.
30. New Orleans States, 18 July 1923.
31. H. Doc. 238, 68th Cong., 1st sess. (1924), pp. 98, 102.
32. Ibid., p. 5; Houston press, 2 January 1925.
33. Rivers and Harbors Act of March 3, 1925; Rivers and Harbors Act of January 21, 1927. Alperin, Custodians, pp. 157-58.
34. H. Doc. 238, 68th Cong., 1st sess. (1924), p. 45.
35. ARCE, 1942, p. 865.
36. Alperin, Custodians, p. 159; Secretary of War, Louisiana-Texas Intracoastal Waterway, New Orleans, La., to Corpus Christi, Tex., H. Doc. 230, 76th Cong., 1st sess. (1939), p. 14.
- 379 Alperin, Custodians, p. 159.
38. Ibid.
39. Ibid., pp. 159-60.
40. Ibid., p. 160.
41. Thomas A. Sands, "The New Orleans District," Proceedings of the Seventy-fifth Annual Convention, Gulf Intracoastal Canal Association, 7-8 August 1980, Victoria, Tex. (Houston: Gulf Intracoastal Canal Association, 1980), p. 6.

42. P. L. 675, 77th Cong., 2d sess.; ARCE, 1943, p. 4; ARCE, 1944, p. 3.
43. "New Orleans Seeks Shorter Route to Gulf," Illustrated World 35 (July 1921): 875-76.
44. Ibid. ; New Orleans States, 15 November 1930; Chief of Engineers, Mississippi i River-Gulf Outlet, H. Committee on Rivers and Harbors Dec. 46. 71st Cong., 2d sess. (1930), pp. 2-3.
45. Secretary of War, Intracoastal Waterway from Mobile, Ala., to New Orleans, La., including the Violet Carol Route, Louisiana, H. Dec. 96, 79th Cong., 1st sess. (1945), p. 8; ARCE, 1945, p. 871.
46. H. Doc. 96, 79th Cong., 1st sess. (1945), pp. 2-8.
47. Secretary of the Army, Mississippi River-Gulf Outlet, H. Dec. 245, 82d Cong., 1st sess. (1951), pp. 12, 40.
48. Cowdrey, Land's End, pp. 71-72.
49. Daniel A. Mazmanian and Jeanne Nienaber, Can Organizations Change?: Environmental Protection, Citizen Participation, and the Corps of Engineers (Washington, D.C.: The Brookings Institution, 1979), pp. 79-100.
- 500 Information provided by the Army Engineers in the New Orleans District.
51. Alperin, Custodians, pp. 161-64.
52. Ibid., p. 164; U.S. Army Corps of Engineers, The Intracoastal Waterway, Gulf Section (Washington, D.C.: Government Printing Office, 1961) .
53. Alperin, Custodians, p. 164.
54. Waterborne Commerce of the United States, Calendar Year 1972, 5 pts. (Fort Belvoir, Vs.: U.S. Army Corps of Engineers, n.d.), pt. 2, pp. 37, 390

CHAPTER 4

1. Secretary of War, Atlantic-Gulf Ship Canal, Fla., H. Doc. 194, 75th Cong., 1st sess. (1938), p. 1.
2. Henry H. Buckman, "Cross-Florida Barge Canal," Proceedings of the Fifty-fourth Annual Convention, Intracoastal Canal Association of Louisiana and Texas, 27-28 September 1959, Corpus Christi, Tex. (Houston: Intracoastal Canal Association of Louisiana and Texas, 1959), p. 11.

3* Marjory Stoneman Douglas, Florida: The Long Frontier (New York: Harper & Row, 1967), p. 82; Buckman, "Canal, " p. 11; George E. Buker, Sun, Sand and Water: A History of the Jacksonville District, U.S. Army Corps of Engineers, 1821-1975 (Jacksonville, Fla.: Jacksonville District, U.S. Army Corps of Engineers, (1981), pp. 155-56.

4. Ibid., pp. 28, 31; H. Exec. Doc. 147, 20th Cong., 2d sess. (1829), pp. 41-46. The quoted phrase is on page 45.

5. Secretary of War, Canal-Atlantic Ocean and Gulf of Mexico, H. Dec. 185, 22d Cong., 2d Sess (1832), pp. 1-7, 49-51; Buker, Sun, Sand and Water, p. 159.

6. ARCE, 1876, pt. 1, p. 543; Buker, Sun, Sand and Water, p. 159.

7. ARCE, 1880, p. 1006; Buker, Sun, Sand and Water, pp. 161-62.

8. Ibid., p. 163; ARCE, 1882, p. 1205.

9. Secretary of War, Intracoastal Waterway, Across Florida Section, H. Doc. 233, 63d Cong., 1st sess. (1913), pp. 7-9; Secretary of War, Intracoastal Waterway - Across Florida Section, S. Doc. 179, 68th Cong., 2d sess. (1924), p. 2; Rivers and Harbors Act of January 21, 1927; Rivers and Harbors Act of July 3, 1930; H. Doc. 194, 75th Cong., 1st sess. (1938), p. 6.

10. Luther J. Carter, The Florida Experience: Land and Water Policy in a Growth State (Baltimore: Johns Hopkins University Press, 1974), p. 270; Buker, Sun, Sand and Water, pp. 164-65.

11. H. Doc. 194, 75th Cong., 1st sess. (1938), p. 2.

12. Buker, Sun, Sand and Water, p. 165; "Florida: Sore Thumb," Time 27 (17 February 1936): 11-12.

13. "Catastrophe: Wind, Water & Woe," Time 26 (16 September 1935): 12-13; "Florida: Sore Thumb," pp. 11-12.

14. Ibid, p. 11.

15. H. Doc. 194, 75th Cong., 1st sess. (1938), p. 2.

16. "Florida: Sore Thumb," p. 12.

17. H. Doc. 194, 75th Cong., 1st sess. (1938), p. 9; Buker, Sun, Sand and Water, pp. 166-67.

18. H. Doc. 194, 75th Cong., 1st sess. (1938), pp. 3-5, 9, 11, 28-29. Markham's quoted statements are on page 5.

19. The quotation is from a letter from Major General Eugene Reybold, Chief of Engineers, to Joseph Mansfield, Chairman of the House Committee on Rivers and Harbors, dated June 12, 1942, and printed in Secretary of War, Waterway Across Northern Florida for Barge Traffic, H. Doc. 109, 79th Cong., 1st sess. (1945), p. 1.

20. Ibid., p. iii.
21. ARCE, 1954, p. 401; Buker, Sun, Sand and Water, p. 170; "Blocking Florida's Ditch," Newsweek 77 (1 February 1971): 55-56; ARCE, 1963, p. 435; ARCE, 1964, p. 415.
22. J. Walsh, "Florida: Nixon Halts Carol Project, Cites Environment," Science 171 (29 January 1971): 357; "Blocking Florida's Ditch," pp. 55-56; "End of the Barge Canal," Time 97 (1 February 1971): 61.
23. Walsh, "Nixon Halts Project," p. 357.
24. Chief of Engineers, Caloosahatchee River and Lake Okeechobee Drainage Areas, Fla., S. Doc. 115, 71st Cong., 2d sess. (1930), p. 1.
25. Marjory Stoneman Douglas, The Everglades: River of Grass (New York: Rinehart & Co., 1947), pp. 10, 36-38.
26. Ibid., pp. 9, 20-210
27. Douglas, Everglades, pp. 251-53 and 258-59; George E. Buker, "The Ugly Duckling: The Beginnings of Florida's Intracoastal Waterway," National Waterways Roundtable Papers: Proceedings on the History and Evolution of U.S. Waterways and Ports (Fort Belvoir, Vs.: Institute for Water Resources, 1980), p. 102; Secretary of War, Caloosahatchee River and Lake Okeechobee Drainage Areas, Florida, H. Doc. 215, 70th Cong., 1st sess. (1928), p. 15-16. The Buckingham Smith Report was published in S. Doc. 242, 30th Cong., 1st sess. (1848).
28. Douglas, Everglades, pp. 268-69, 275-76.
29. ARCE, 1879, pp. 864-70. The quotations, taken from Meigs' reports, are on p. 864.
30. ARCE, 1915, p. 1828.
31. Douglas, Everglades, pp. 282-83.
32. ARCE, 1888, p. 1094.
33. ARCE, 1887, p. 1235.
34. Douglas, Everglades, pp. 284-86. The quotation is on p. 286.
35. ARCE, 1887, pp. 1235-36; ARCE, 1915, p. 1828; Buker, "Ugly Duckling," p. 103.
36. Douglass, Everglades, pp. 283-88, 309.
37. Ibid., pp. 312, 314, 316-18, 322-23; H. Doc. 215, 70th Cong., 1st sess. (1928), p. 16; and Baker, "Ugly Duckling," p. 104.

38. H. Doc. 215, 70th Cong., 1st sess. (1928), p. 16-17; Douglas, Everglades, pp. 341-42. S. Doc. 379, 63d Cong., 2d sess. (1914) contains the Isham Randolph Report.
39. Ibid., PP. 339-40, 345; Buker, "Ugly Duckling," p. 104.
40. ARCE, 1888, p. 1094.
41. Buker, "Ugly Duckling," p. 105.
42. Secretary of War, Intracoastal Waterway from Caloosahatchee River to Withlacoochie River, Fla., H. Doc. 371, 76th Cong., 1st sess. (1939), Pp. 3, 4, 10; Rivers and Harbors Act of August 30, 1935.
43. H. Doc. 371, 76th Cong., 1st sess. (1939), pp. 3-4, 6-7.
44. Rivers and Harbors Act of September 19, 1890; ARCE, 1890, p. 1618; Rivers and Harbors Act of June 3, 1896; ARCE, 1918, p. 776; Rivers and Harbors Act of March 3, 1907; ARCE, 1918, p. 778; Rivers and Harbors Act of March 2, 1919.
45. Rivers and Harbors Act of June 25, 1910; Secretary of War, Clearwater Harbor and Boca Ceiga [sic] bay to Tampa Bay, Florida, H. Dec. 1190, 60th Cong., 2d sess. (1908); ARCE, 1921, p. 797.
46. H. Dec. 371, 76th Cong., 1st sess. (1939), pp. 2-5, 26-27.
47. Rivers and Harbors Act of March 2, 1945; Secretary of the Army, Local Contribution Toward Alternate Route C-1, Navigation Improvement at Venice, Fla., H. Doc. 109, 85th Cong., 1st sess. (1957), pp. 5, 7, and 8, including the quoted words in page 7; ARCE, 1961, pp. 492-93; Buker, Sun, Sand and Water, p. 128.
48. ARCE, 1967, p. 432; Waterborne Commerce of the United States, Calendar Year 1978, pt. 2, p. 50.
49. Letter, Randolph Hodges, Director, Florida Board of Conservation, to the Chief of Engineers, June 12, 1968, printed in Secretary of the Army, Gulf Intracoastal Waterway, St. Marks to Tampa Bay, Florida, H. Doc. 386, 90th Cong., 2d sess. (1968), p. vii; Rivers and Harbors Act of August 13, 1968; information on the recent status of this project provided by Army Engineers in the Jacksonville District.
50. Buker, Sun, Sand and Water, p. 128.

CHAPTER 5

1. ARCE, 1950, p. 1639.
2. Waterborne Commerce of the United States, Calendar Year 1978, pt. 2, pp. 36, 92.
3. John Miloy and Christian Phillips, Primary Economic Impact of the Gulf Intracoastal Waterway in Texas (Texas Engineering Experiment

Station: Texas A&M University, 1974), p. 8; Allen J. Ellender, "Water Conservation, " Proceedings of the Sixtieth Annual Convention, Gulf Intracoastal Canal Association, 19-20 September 1965, Victoria, Tex. (Houston: Gulf Intracoastal Canal Association, 1965), p. 10.

4. Waterborne Commerce of the United States, Calendar year 1979, 5 pts. (Fort Belvoir, Vs.: U.S. Army Corps of Engineers, n.d.), pt. 2, pp. 36, 92. pt. 2, pp. 32-44.

5. Ibid., 1979, pt. 2, pp. 41-44; ibid., 1971, pt. 2, pp. 38-40; and ibid., 1961, pt. 2, p. 43.

6. Christian Phillips, "Economic Impact of the Gulf Intracoastal Waterway in Texas," Summary Report: Analysis of the Role of the Gulf Intracoastal Waterway in Texas (Texas Ports Association, Texas Coastal and Marine Council, and Sea Grant Program, Texas A&M University, 1975), pp. 9-11.

7. John Miloy, "Introduction, " and Phillips, "Economic Impact," Summary Report, pp. 1, 9.

8. Ibid., pp. 9-10. This percentage is based on the weight of the goods exported. Natural gas and oil exported from Texas by pipeline was not considered in these calculations.

9. From Texas State Department of Highways and Public Transportation, The Gulf Intracoastal Waterway in Texas, Summary, 1976 (Austin: State Department of Highways and Public Transportation, 1976), p. 8.

10. Texas State Department of Highways and Public Transportation, The Gulf Intracoastal Waterway in Texas, 1980 (Austin: State Department of Highways and Public Transportation, 1980), pp. xxix-xxx.

11. Texas Department of Highways, Summary, 1976, p. 3.

12. Ibid., p. 6.

13. Robert T. Tippee, "The Oil Surplus--A Fleeting Phenomenon?," Oil and Gas Journal 79 (9 November 1981): 141.

14. Rawleigh Warner, Jr., "A Look into the 1980s," Oil and Gas Journal 79 (9 November 1981): 218.

15. Ibid.

16. Texas Department of Highways, Summary, 1976, p. 9; Miloy and Phillips, Primary Economic Impact, p. 96.

17. Texas Department of Highways, Gulf Intracoastal Waterway, 1980, p. xxvii; Act of October 23, 1962. The Sabine River to Galveston segment of the GIWW is busiest in terms of the average tonnage carried per mile. This figure is derived by dividing the total ton-miles carried in the segment by the length of the segment. See Waterborne Commerce of the United States, Calendar year 1979, pt. 2, pp. 32-44.

18. Texas Department of Highways, Gulf Intracoastal Waterway, 1980, p. xxi.
19. Ibid., pp. xxi-xxii.
20. Ibid., pp. xxvii-xxviii.
21. Texas Department of Highways, Summary, 1976, p. 14; Texas Department of Highways, Gulf Intracoastal Waterway, 1980, pp. xxxi-xxxii.
22. Robert F. Morison, "Panel Passes Bill on Port-funded Dredging," Journal of Commerce 350 (19 November 1981): 11A; Texas Department of Highways, Summary, 1976, p. 14.
23. "The Waterway That Cannot Be Stopped," Science 213 (14 August 1981): 7410
24. Texas Department of Highways, Summary, 1976, p. 15.